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SCULLY, SCOTT, MURPHY &  
PRESSER

# Fax

**To:** U.S. Patent and Trademark Office      **From:** Edward W. Grolz, Esq.  
**Fax:** 1(703) 746-9195      **Pages:** 15 (including cover sheet)  
**Phone:**      **Date:** 6/1/2004  
**Re:** Response to Notice Regarding      **CC:**  
Benefit/Priority Claim(s)  
U.S.S.N.: 10/646,874  
Our Docket: 15463ZYXWV

☒ Urgent      ☐ For Review      ☐ Please Comment      ☐ Please Reply      ☐ Please Recycle

● Attached for recordation in the United States Patent and Trademark Office are the following documents:

1. Notice Regarding Benefit/Priority Claim(s)
2. Response to Notice Regarding Benefit/Priority Claim(s)
3. Request for Corrected Filing Receipt
4. Copy of Form PCT/DO/EO/903
5. Filing Receipt corresponding to U.S.S.N.: 07/847,018
6. Certificate of Facsimile Transmission dated June 1, 2004

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Nicole De Santis at ext. 571.

Page 1 of 2



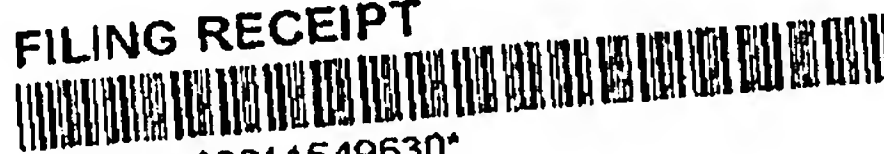
# UNITED STATES PATENT AND TRADEMARK OFFICE

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| APPL NO.  | FILING OR 371 (c) DATE | ART UNIT | FIL FEE REC'D | ATTY. DOCKET NO      | DRAWINGS | TOT CLMS | IND CLMS |
|-----------|------------------------|----------|---------------|----------------------|----------|----------|----------|
| 0/646,874 | 08/22/2003             | 1648     | 1426          | 15463ZYXVV (PC9003E) | 49       | 26       | 3        |

CONFIRMATION NO. 6784

## FILING RECEIPT



\*OC000000011549630\*

3389  
SCULLY SCOTT MURPHY & PRESSER, PC  
100 GARDEN CITY PLAZA  
GARDEN CITY, NY 11530

Date Mailed: 12/22/2003

Receipt is acknowledged of this regular Patent Application. It will be considered in its order and you will be notified as to the results of the examination. Be sure to provide the U.S. APPLICATION NUMBER, FILING DATE, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this receipt. If an error is noted on this Filing Receipt, please write to the Office of Initial Patent Examination's Filing Receipt Corrections, facsimile number 703-746-9195. Please provide a copy of this Filing Receipt with the changes noted thereon. If you received a "Notice to File Missing Parts" for this application, please submit any corrections to this Filing Receipt with your reply to the Notice. When the USPTO processes the reply to the Notice, the USPTO will generate another Filing Receipt incorporating the requested corrections (if appropriate).

## Applicant(s)

Timothy J. Miller, Malvern, PA;  
Albert Paul Reed, Exton, PA;  
Sharon R. Klepfer, Clifton Heights, PA;  
Nancy E. Pfeiffer, Seward, NE;  
Brian T. Suiter, Lincoln, NE;  
Elaine V. Jones, Wynnewood, PA;

Assignment For Published Patent Application  
Pfizer, Inc., New York, NY;

Domestic Priority data as claimed by applicant

This application is a CON of 09/854,799 05/14/2001 PAT 6,642,359  
which is a CON of 08/392,459 02/22/1995 PAT 6,280,974  
which is a CON of 07/847,018 04/08/1992 ABN

Foreign Applications

If Required, Foreign Filing License Granted: 12/19/2003

Projected Publication Date: 04/01/2004

Non-Publication Request: No

Early Publication Request: No

Page 2 of 2

Title Recombinant feline coronavirus S proteins

Preliminary Class  
435

**LICENSE FOR FOREIGN FILING UNDER**  
**Title 35, United States Code, Section 184**  
**Title 37, Code of Federal Regulations, 5.11 & 5.15**

**GRANTED**

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No license under 35 U.S.C. 184 has been granted at this time, if the phrase "IF REQUIRED, FOREIGN FILING LICENSE GRANTED" DOES NOT appear on this form. Applicant may still petition for a license under 37 CFR 5.12, if a license is desired before the expiration of 6 months from the filing date of the application. If 6 months has lapsed from the filing date of this application and the licensee has not received any indication of a secrecy order under 35 U.S.C. 181, the licensee may foreign file the application pursuant to 37 CFR 5.15(b).

Page 1 of 3



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| APPLICATION NUMBER | FILING OR 371 (c) DATE | FIRST NAMED APPLICANT | ATTY. DOCKET NO./TITLE |
|--------------------|------------------------|-----------------------|------------------------|
| 10/646,874         | 08/22/2003             | Timothy J. Miller     | 15463ZYXWV (PC9003E)   |

CONFIRMATION NO. 6784

23389  
 SCULLY SCOTT MURPHY & PRESSER, PC  
 400 GARDEN CITY PLAZA  
 GARDEN CITY, NY 11530



\*OC000000012489960\*

Date Mailed: 04/29/2004

## Notice Regarding Benefit/Priority Claim(s)

☐ Improper Benefit Claim(s) to Prior-Filed Nonprovisional Application(s)

The benefit claim(s) to prior-filed nonprovisional application(s) is improper because there is no specific reference for each prior-filed application that includes: (1) the identification of the prior-filed application by application number, or international application number and international filing date; and (2) a clear indication the relationship (i.e., continuation, divisional, or continuation-in-part) of the nonprovisional applications. For example, applicant should amend the specification to include a specific reference, such as "This application is a continuation of Application No. 10/---,--- filed ---." in the first sentence of the specification following the title.

Applicant should review each benefit claim submitted and, if appropriate, provide the proper reference to the prior-filed application(s) as required by 37 CFR 1.78. A proper relationship includes an identification of each nonprovisional application as a continuation, divisional or continuation-in-part application of the immediate prior-filed nonprovisional application for which a benefit is claimed under 37 CFR 1.78 in order to establish copendency throughout the entire chain of prior-filed applications. The specific reference must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for each benefit claim must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed. See 37 CFR 1.78(a).

☐ Improper Benefit Claim(s) to Prior-Filed Nonprovisional Application(s)

The benefit claim(s) to prior-filed provisional application(s) is improper because the instant application was not filed within twelve (12) months from the filing date of the provisional application,



benefit of the provisional application and filed within 12 months of the filing date of the provisional application. For example, applicant should amend the specification to include a specific reference, such as "This application is a continuation of Application No. 10/---,--- filed ---, which claims the benefit of U.S. Provisional Application No. 60/---,--- filed---." in the first sentence of the specification following the title.

Applicant should review each benefit claim submitted and, if appropriate, provide the proper reference to the prior-filed applications (including an indication of any intermediate nonprovisional application that is directly claiming the benefit of the provisional application and filed with 12 months of the filing date of the provisional application) as required by 37 CFR 1.78. The required reference must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for each benefit claim must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed during the pendency of the instant application.

☐ **Improper Priority Claim(s) to Prior-Filed Foreign Application(s)**

The instant application was not filed within twelve (12) months from the filing date of the prior-filed foreign application, and there is no benefit claim to an intermediate nonprovisional application filed within 12 months of the filing date of the foreign application. Applicant should review each priority claim submitted and, if appropriate, provide the proper reference to any intermediate nonprovisional application filed within 12 months of the filing date of the foreign application in compliance with 37 CFR 1.78, or delete the priority claim. The required reference to an intermediate nonprovisional application must be included in the domestic priority information section of an application data sheet (37 CFR 1.76), or the specification must contain, or be amended to contain, such reference in the first sentence following the title.

**Timeliness:** The required reference for the benefit claim to an intermediate nonprovisional application must be filed during the pendency of the instant application and within the later of: (1) four months from the actual filing date of the instant application, or the national stage commencement date if the instant application is a national stage application under 35 U.S.C. 371; or (2) sixteen months from the filing date of the prior-filed application. Failure to timely file the required reference is considered a waiver of any benefit claim, unless a grantable petition to accept an unintentionally delayed claim under 37 CFR 1.78(a), the surcharge set forth in 37 CFR 1.17(t), and the required reference are filed.

☐ **Benefit Claims to More Than 400 Prior-Filed Applications**

The Office's automated system to record and capture benefit claims is only capable of recording benefit claims for 400 prior-filed applications. Therefore, the Office is unable to generate a filing receipt containing benefit claims for more than 400 prior-filed applications even though applicant is entitled to submit benefit claims for more than 400 prior-filed applications. Accordingly, applicant should not request a corrected filing receipt to include benefit claims for more than 400 prior-filed applications.



**Prior-Filed Nonprovisional Application has been Improperly Indicated as a National Stage (35**

Page 3 of 3

Applicant submitted a benefit claim to a prior-filed nonprovisional application and improperly indicated that the prior-filed application is a national stage application under 35 U.S.C. 371. The Office's records show that the prior-filed application is an application filed under 35 U.S.C. 111(a). The Office has entered the benefit claim to the prior-filed application as a benefit claim to an application filed under 35 U.S.C. 111(a). Any request for a corrected filing receipt to include the indication that the prior-filed application is a national stage application will not be granted unless applicant supplies evidence that the prior application was in fact a national stage application. Accordingly, applicant should not submit such request without such evidence. Applicant should submit an amendment (or an application data sheet (ADS) if the benefit claim was submitted in an ADS) to delete the indication that the prior-filed application is a national stage application.

For more information and examples on benefit claims, please see Claiming the Benefit of a Prior-Filed Application under 35 U.S.C. 119(e), 120, 121, and 365(c), 1268 Off. Gaz. Pat. Office 89 (March 18, 2003), which is available on the USPTO website at <http://www.uspto.gov/web/offices/com/sol/og/2003/week11/patbene.htm>, and the Manual of Patent Examining Procedure (MPEP) §§ 201.11 and 201.14.

PART 2 - COPY TO BE RETURNED WITH RESPONSE

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE**

|                      |  |                   |                         |
|----------------------|--|-------------------|-------------------------|
| <b>Applicant(s):</b> | Timothy J. Miller, et al.                    | <b>Examiner:</b>  | Unassigned              |
| <b>Serial No.:</b>   | 10/646,874                                   | <b>Art Unit:</b>  | 1648                    |
| <b>Filed:</b>        | August 22, 2003                              | <b>Docket:</b>    | 15463ZYXWV<br>(PC9003F) |
| <b>For:</b>          | RECOMBINANT FELINE<br>CORONAVIRUS S PROTEINS | <b>Conf. No.:</b> | 6784                    |
|                      |  | <b>Dated:</b>     | June 1, 2004            |

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

**RESPONSE TO NOTICE REGARDING  
BENEFIT/PRIORITY CLAIM**

Sir:

In response to the Notice Regarding Benefit/Priority Claim(s) dated April 29, 2004, applicants respectfully submit that the prior submitted benefit claim to a prior-filed nonprovisional application indicating that said application was a national stage application under 35 U.S.C. 371 was in fact correct. Accordingly, applicants are resubmitting a request for corrected filing receipt. Accompanying said request, is a copy of Form PCT/DO/EO/903 evidencing the fact that U.S.S.N. 07/847,018 was in fact filed under 35 U.S.C. 371 based on PCT/US91/08525 filed on November 14, 1991. In addition, a copy of the filing receipt to U.S.S.N. 07/847,018 is also enclosed, said filing receipt also indicating the benefit claim to PCT/US91/08525.

---

**CERTIFICATION OF FACSIMILE TRANSMISSION**

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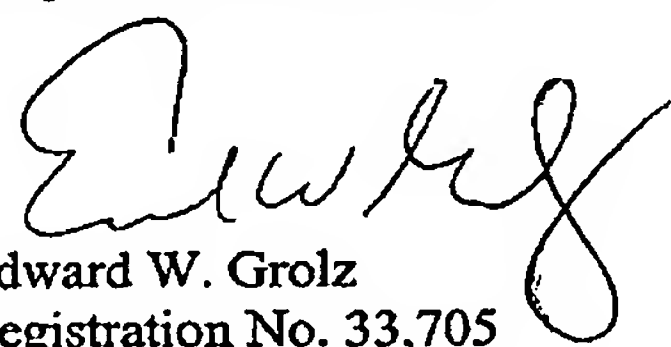
**Dated:** June 1, 2004

  
**Edward W. Grolz**



Based on the above, it is respectfully requested that the attached Request for Corrected Filing Receipt be granted and the corrected filing receipt be issued as indicated in said Request.

Respectfully submitted,



Edward W. Grolz  
Registration No. 33,705

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EWG/nd  
(encs)

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Date: June 1, 2004  
Fax # 703-746-9195      Pages: 7 (including cover sheet)  
From: SCULLY, SCOTT, MURPHY & PRESSER  
Re: Timothy J. Miller, et al.  
RECOMBINANT FELINE CORONAVIRUS S PROTEINS  
U.S. Patent Appln. No.: 10/646,874  
Our Docket: 15463ZYXWV

**COMMENTS:**

The Filing Receipt for the above-identified Patent Application has the Domestic Priority data as claimed by applicant incomplete and should read:

**Domestic Priority data as claimed by applicant:**

**This application is a CON of 09/854,799 05/14/2001 PAT 6,642,359 which is a CON of 08/392,459 02/22/1995 PAT 6,280,974 which is a CON of 07/847,018 04/08/1992 ABN; which is a 371 of PCT/US91/08525, filed 11/14/1991; which is a CIP of 07/698,927 05/13/1991 ABN; which is a CIP of 07/613,066 11/14/1990 ABN;**

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**IN THE SPECIFICATION:**

Please insert at page 1, line 2, with the following paragraph:

**--Cross Reference To Related Applications**

The present application is a continuation of Application Serial No. 09/854,799, filed May 14, 2001, which is a continuation of Application Serial No. 08/392,459, filed February 22, 1995; which is a continuation of Application Serial No. 07/847,018, filed April 8, 1992, now abandoned; which is a 371 of PCT/US91/08525, filed November 14, 1991; which is a continuation-in-part of Application Serial No. 07/698,927, filed May 13, 1991, now abandoned; which is a continuation-in-part of Application Serial No. 07/613,066, filed November 14, 1990, now abandoned.--

Please amend the paragraph beginning on page 8, line 7, as follows:

~~Figure 3 (3-1 to 3-2) illustrates~~ Figures 3A-3B illustrate the nucleotide {(SEQ ID NO: 19)} and amino acid sequence {(SEQ ID NO: 20)} of the PCR expression clone AR58-3.

Please amend the paragraph beginning on page 8, line 10, as follows:

~~Figure 4 (4-1 to 4-12) illustrates~~ Figures 4A-4L illustrate the S gene nucleotide and amino acid sequences of DF2 FIPV {(SEQ ID NO: 21 and 22)}. Also illustrated is a fragment of the sequences of DF2-HP {(SEQ ID NO: 23 and 24)} which are identical to the sequences of DF2 FIPV (to the extent DF2 FIPV has been sequenced) with the exception of the nucleotide changes above and amino acid differences below the DF2-HP sequences.

Please amend the paragraph beginning on page 8, line 17, as follows:

~~Figure 5 (5-1 to 5-12) illustrates~~ Figures 5A-5L illustrate a fragment of the S gene TS-BP nucleotide sequence {(SEQ ID NO: 27)} and amino acid sequence {(SEQ ID NO: 28)} by

PTO-103X  
(Rev. 11-86)

## FILING RECEIPT



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|---------------|-------------|----------------|---------------|---------------------|-------|--------|--------|
| 07/847,018    | 04/08/92    | 1806           | \$2,096.00    | 14532-CIP-2         | 30    | 50     | 11     |

WILLIAM T. KING  
SMITHKLINE BEECHAM CORPORATION  
CORPORATE PATENTS-U.S., UW2220  
P.O. BOX 1539  
KING OF PRUSSIA, PA 19406-0939

Receipt is acknowledged of the patent application identified herein. It will be considered in its order and you will be notified as to the examination thereof. Be sure to give the U.S. SERIAL NUMBER, DATE OF FILING, NAME OF APPLICANT, and TITLE OF INVENTION when inquiring about this application. Fees transmitted by check or draft are subject to collection. Please verify the accuracy of the data presented on this transmittal.

Applicant(s)

TIMOTHY J. MILLER, MALVERN, PA; ALBERT P. REED, EXTON, PA;  
SHARON R. KLEPPER, CLIFTON HEIGHTS, PA; NANCY E. PFEIFFER, SEWARD, NE;  
BRIAN T. SUITER, LINCOLN, NE;  
ELAINE V. JONES, WYNNEWOOD, PA.

FOREIGN/PCT APPLICATIONS-PCT

PCT/US91/08525 11/14/91

FOREIGN FILING LICENSE GRANTED 01/05/93  
TITLE  
RECOMBINANT FELINE CORONAVIRUS S PROTEINS  
PRELIMINARY CLASS: 424

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## INTERNATIONAL APPLICATION PUBLISHED UNDER THE PATENT COOPERATION TREATY (PCT)

|  |           |  |
|--|-----------|--|
| <b>(51) International Patent Classification 5 :</b><br>A61K 39/12, C07K 3/00<br>C07H 15/12, C12P 21/06<br>C12Q 1/70, 1/68, A61K 35/14  | <b>A1</b> | <b>(11) International Publication Number:</b> WO 92/08487<br><br><b>(43) International Publication Date:</b> 29 May 1992 (29.05.92)  |
| <b>(21) International Application Number:</b> PCT/US91/08525<br><b>(22) International Filing Date:</b> 14 November 1991 (14.11.91)<br><b>(30) Priority data:</b><br>613,066                      16 November 1990 (16.11.90)    US<br>698,927                      13 May 1991 (13.05.91)        US<br><b>(71) Applicant (for all designated States except US):</b> SMITH-KLINE BEECHAM CORPORATION [US/US]; Corporate Patents - U.S., 709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406 (US).<br><br><b>(72) Inventors; and</b><br><b>(75) Inventors/Applicants (for US only) :</b> MILLER, Timothy, J. [US/US]; 102 Crestside Way, Malvern, PA 19355 (US). REED, Albert, Paul [US/US]; 117 Baker Circle, Exton, PA 19341 (US). KLEPFER, Sharon, R. [US/US]; 136 N. Glenwood Avenue, Clifton Heights, PA 19018 (US). PFEIFFER, Nancy, E. [US/US]; Route 1, Box 20, Seward, NB 68434 (US). SUITER, Brian, T. [US/US]; 6211 South 42nd Street, Lincoln, NB 68516 (US). JONES, Elaine, V. [US/US]; 1217 Andover Road, Greenhill Farms, PA 19151 (US). |           | <b>(74) Agents:</b> KING, William, T. et al.; SmithKline Beecham Corporation, Corporate Patents - U.S. (UW2220), 709 Swedeland Road, P.O. Box 1539, King of Prussia, PA 19406 (US).<br><br><b>(81) Designated States:</b> AT (European patent), AU, BE (European patent), CA, CH (European patent), DE (European patent), DK (European patent), ES (European patent), FR (European patent), GB (European patent), GR (European patent), IT (European patent), JP, KR, LU (European patent), NL (European patent), SE (European patent), US.<br><br>Published<br><i>With international search report.</i> |
| <b>(54) Title:</b> RECOMBINANT FELINE CORONAVIRUS S PROTEINS<br><br><b>(57) Abstract</b><br><br>Novel galactokinase/FIPV S fusion proteins and their use as vaccine components, therapeutic agents, diagnostic agents, as well as methods of making same are provided.   |           |  |



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|   |  | Date of Mailing  | 15 October 1992    |
|   |  | File Reference   | 14532 October 1992 |
| IDENTIFICATION OF THE INTERNATIONAL APPLICATION   |  |  |                    |
| International application Number<br>PCT/US91/08525  | International filing date<br>14 NOV 1991 | Priority date claimed<br>14 NOV 1990   |                    |
| Applicant for DO/EO/US<br>MILLER, TIMOTHY J.  |  |  |                    |
| NOTIFICATION  |  |  |                    |
| <p>The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a <input checked="" type="checkbox"/> Designated Office, <input type="checkbox"/> Elected Office, has determined that the above identified international application has met the requirements of 35 U.S.C. 371 and 37 CFR <input checked="" type="checkbox"/> 1.494, <input type="checkbox"/> 1.495 and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.</p> <p>The United States Serial Number assigned to the application and the relevant dates are:<br/><u>07/897,018</u>      <u>08 APR 1992</u>      <u>08 APR 1992</u><br/>U.S. NATIONAL SERIAL NO.    35 U.S.C. 102(e) DATE    DATE OF RECEIPT 35 U.S.C. 371 REQUIREMENTS</p> <p><input type="checkbox"/> A request for immediate examination under 35 U.S.C. 371 (f) was received on _____ and the application will be examined in turn.</p> <p><input checked="" type="checkbox"/> No request for immediate examination under 35 U.S.C. 371(f) was received. The application will not be processed or examined before the time limit set forth in either <input type="checkbox"/> PCT Article 23 (Chapter I of the PCT), or <input type="checkbox"/> PCT Article 40 (Chapter II of the PCT) whichever is applicable.</p> |  |  |                    |
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## FILING RECEIPT



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WILLIAM T. KING  
SMITHKLINE BEECHAM CORPORATION  
CORPORATE PATENTS-U.S., UW2220  
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## Applicant(s)

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FOREIGN/PCT APPLICATIONS-PCT

PCT/US91/08525 11/14/91

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|   |  | Date of Mailing  | 15 October 1992     |
|   |  | File Reference   | 145322 October 1992 |
| IDENTIFICATION OF THE INTERNATIONAL APPLICATION   |  |  |                     |
| International application Number<br>PCT/US91/08525  | International filing date<br>14 NOV 1991 | Priority date claimed<br>14 NOV 1990   |                     |
| Applicant for DO/EO/US<br>MILLER, TIMOTHY J.  |  |  |                     |
| NOTIFICATION  |  |  |                     |
| <p>The applicant is hereby advised that the United States Patent and Trademark Office in its capacity as a <input checked="" type="checkbox"/> Designated Office, <input type="checkbox"/> Elected Office, has determined that the above identified international application has met the requirements of 35 U.S.C. 371 and 37 CFR <input checked="" type="checkbox"/> 1.494, <input type="checkbox"/> 1.495 and is ACCEPTED for national patentability examination in the United States Patent and Trademark Office.</p> <p>The United States Serial Number assigned to the application and the relevant dates are:<br/><u>07/897,018</u>      <u>08 APR 1992</u>      <u>08 APR 1992</u><br/>U.S. NATIONAL SERIAL NO.      35 U.S.C. 102(e) DATE      DATE OF RECEIPT 35 U.S.C. 371 REQUIREMENTS</p> <p><input type="checkbox"/> A request for immediate examination under 35 U.S.C. 371 (f) was received on _____ and the application will be examined in turn.</p> <p><input checked="" type="checkbox"/> No request for immediate examination under 35 U.S.C. 371(f) was received. The application will not be processed or examined before the time limit set forth in either <input type="checkbox"/> PCT Article 23 (Chapter I of the PCT), or <input type="checkbox"/> PCT Article 40 (Chapter II of the PCT) whichever is applicable.</p> |  |  |                     |
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